From: Tim Belden

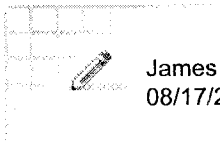
To: James D Steffes/HOU/EES@EES
cc: Jeff Dasovich/SFO/EES@EES, Mary Hain/HOU/ECT@ECT, Susan J Mara/SFO/EES@EES, Mona L Petrochko/SFO/EES@EES, Bruno Gaillard/SFO/EES@EES, Sarah Novosel/Corp/Enron@ENRON@EES, Paul Kaufman/PDX/ECT@ECT, Joe Hartsoe/Corp/Enron@ENRON@EES, Steven J Kean/HOU/EES@EES, Richard Shapiro/HOU/EES@EES
Subject: Re: FERC INVESTIGATION IN CA - What should they be looking for?

Here are some more thoughts:

1. FERC should take a hard look at why the ISO is almost always in an "inc" situation in real time. Without structural incentives to go short into real time, I would expect the CAISO to "inc" in some hours and "dec" in others -- with no consistent patterns.
   - The IOU's have four choices for purchasing power: PX Block Forward, PX Day Ahead, PX Day Of, and CAISO Ex Post. They had ample opportunity to purchase lower cost power in the PX Block Forward but didn't buy enough. That left them short in the Day Ahead. They can reduce Day Ahead prices by moving some of their load to the Ex Post market. Dave Parquet did an Econ 101 presentation on this incentive at the CAISO board meeting in June.
   - The ISO remains primarily in "inc" mode even during the shoulder months when prices are lower, another indicator that the real time "inc" problem is driven by the load side rather than the supply side. The IOU's continue to go short into the ISO Ex Post market even when the CAISO Ex Post price is consistently above the PX Day Ahead price.
   - There is evidence that the IOU's are not willing to pay above the CAISO price cap for energy from the PX in the Day Ahead market. Does it matter that the price cap for the ISO also acts as a PX price cap?
2. The NOx market in California is very tight. How has this contributed to higher costs and has the complete lack of available NOx credits prevented any generators from running?
3. How large was the impact of the below normal water year on the supply side? The attached presentation quantifies this effect in the Northwest. (I have a theory on how hydro capacity completely overstates reserve margins in the west from an economic perspective. I can go into more detail if you wish.)
4. Friction between California PX and ISO markets and other western markets. For example, why are actual flows going into the state yet prices out side of the state are higher? Another example of anomylous behavior is at COB on 8/11 and 8/12. There was congestion from California TO the northwest those days in the Day Ahead market. In real time the NW ended up being a net seller of about 3,000 MW from the NW TO California.
5. Demand Side - we really need to press on this issue because all of the proponents of price caps claim that as soon as the demand side is "workably competitive" then there is no need for price caps. Is large-scale economic demand response required for a competitive market? What if demand response is there, but at very high prices? The demand response in California is a joke. With 2700 MW of interuptible, why did the utilities and the CAISO only get around 600 MW of economic demand response. Much of this response comes at $1500/MWh. The assymetric treatment of supply side resources and demand side resources can be justified on environmental grounds, but not economic grounds. So why this assymetric treatment? This gets to the question of the fine line between "scarcity rents" which are ok, and market power which is not. If power is scarce, and demand truly values it at $1500/MWh then shouldn't that be the price. At what price would the rest of the interuptible load economically curtail? Bottom line -- there are about 2,000 MW of load that should be able to respond to price signals that chooses not to or values power at more than $1500/MWh.
6. Burden of proof -- what empirical measures should be used to assess market power? The reports published to date have been unimpressive. The Market Analysis Unit report, for example, does a bunch of handwaving and then concludes that there is market power. But they never explain why. I would think that proof might be something like this: Generator X sets price y% of the time when loads exceed Z MWs. Or, four generators set price 80% of the time when prices exceed $200/MWh. They have all the data to be able to tell, yet they don't provide any empirical measures. The only test I've heard of so far is the UC Energy Institute report that demonstrates that generators are submitting bids above their marginal cost. The PX report states that supply bids are fewer and at higher prices than

last year. They fail to mention the fact that there are 5,000 fewer MW of hydro this year relative to last.

James D Steffes@EES



James D Steffes@EES
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cc: Steven J Kean/HOU/EES@EES, Richard Shapiro/HOU/EES@EES
Subject: FERC INVESTIGATION IN CA - What should they be looking for?

As we begin to meet with FERC Staff on the Wholesale market issues related to CA problems, I think that we need to put together a list of questions that FERC needs to be asking Western power market participants.

The following are some questions that I think are important to have FERC ask; I'm sure there are more.

1. Were California utilities underscheduling load into the PX day ahead market?
2. How many MWs did the CA ISO procure during each hour during the Summer 2000? How does this compare with CA ISO procurement during 1999?
3. Has PG&E changed its bidding behavior associated with its Hydro facilities in 2000?
3. Are there baseload facilities that were operated differently in 2000 than in 1999?
4. Were any generation plants off-line due to unplanned maintenance during Summer 2000?
5. How did the CA ISO demand side program work? Why didn't more load participate?
6. What options did SDG&E have to "hedge" its retail rates? What were prices in the CAL PX block forward market on Jan 15, 2000 and May 15, 2000?
7. How high did natural gas prices go in California for generation during Summer 2000?
8. Were other Western power markets prices higher (year-on-year)?
9. Did the CA ISO Board face political pressure to reduce bid caps? Is this appropriate for a FERC jurisdictional entity?
10. What specific details is SDG&E referring to in its Complaint on "unworkably competitive" CA ISO markets? Can these be fixed "quickly"?

Please add other questions.

Jim